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Federal Communications Commission
Office of Secretary

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of)
)
Advanced Television Systems)
and Their Impact Upon the)
Existing Television Broadcast)
Service)

MM Docket No. 87-268

Fifth Further Notice of)
Proposed Rule Making)

**FURTHER COMMENTS OF THE
ADVANCED TELEVISION SYSTEMS COMMITTEE**

Pursuant to the Commission's Public Notice (FCC 96-465) dated November 27, 1996, the Advanced Television Systems Committee ("ATSC") hereby submits the following comments on an agreement regarding technical standards for digital television ("DTV") recently reached among representatives of the television broadcasting, consumer electronics manufacturing and computing industries. This agreement is embodied in a letter to Commissioner Ness dated November 26, 1996, signed by the Broadcasters Caucus, the Consumer Electronics Manufacturers Association, and the Computer Industry Coalition on

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Advanced Television Service. Among other things, these parties agree that no later than December 31, 1996 the Commission should adopt the voluntary ATSC DTV Standard (A/53), except for the specific video format constraints contained therein, as the transmission standard for the nation's next generation of terrestrial broadcast television.

The ATSC members welcome this agreement as a means of resolving the controversy that has delayed adoption of a DTV Standard and the introduction of digital television broadcasts. Although we would have preferred to see the entire ATSC DTV Standard adopted by the Commission, we believe that incorporating most aspects of the Standard into the Commission's rules, while relying on voluntary industry standards for the specific video formats, as contemplated by the recent agreement, provides a workable solution that will give broadcasters, manufacturers, and consumers sufficient confidence and certainty to make the further substantial investments required for a rapid transition to digital broadcast television service. Accordingly, we urge the Commission to act before the end of this year to approve the ATSC DTV Standard, sans the specific video format constraints, as described in the agreement.

Indeed, under this latest agreement the bulk of the ATSC DTV Standard will be incorporated into the Commission's rules, including the Dolby AC-3 audio system, the MPEG-2 video compression techniques, the MPEG-2 packetized data transport structure, and the 8-VSB modulation scheme and transmission system, all developed and tested as part of the Grand Alliance high-definition television ("HDTV") system. With these elements clearly specified and required for digital broadcasts over the transition channels to be loaned to broadcasters, the industry can safely rely on voluntary industry standards such as the ATSC

DTV Standard for the specific video formats to be utilized in upgrading the nation's broadcast television infrastructure to digital, high-definition capability.

Voluntary industry standards already play an important role in ATSC's activities to develop the standards required for advanced television services. Prior to being recommended to the Commission by its Advisory Committee, the ATSC DTV Standard itself was adopted as a voluntary industry standard in April, 1995 and augmented to include standard-definition ("SDTV") video formats in September of 1995. Furthermore, since then, the ATSC has adopted voluntary industry standards that supplement the basic ATSC DTV Standard recommended to the Commission, including standards for an electronic program guide, system information, and a unique program identifier. In addition, the ATSC is currently hard at work on other voluntary industry standards, including a data broadcasting standard being developed under the leadership of our computer industry members. In fact, what the latest agreement does is adjust by one step the boundary between those aspects of an industry consensus that are embodied in FCC rules and those aspects that are left solely to voluntary industry standards.

We remain convinced that conformance to a strong industry standard, including video formats, is required for the successful upgrading of universal, free over-the-air television service, and we hope and fully expect that broadcasters and equipment manufacturers will continue to adhere voluntarily to the ATSC DTV video formats in the absence of an FCC requirement to do so. Moreover, we believe that relying on voluntary industry standards for digital terrestrial television picture formats makes it even more essential that all interested parties participate fully in such standards activities, and we reiterate our invitation for even greater participation from the computer, film and telecommunications industries, including

greater representation from other countries, many of whom intend to adopt or are seriously considering adopting the ATSC DTV Standard.

Although representatives of the Film Coalition participated in the lengthy discussions leading up to the recent agreement, as yet they have not endorsed its terms. We are sensitive to the concerns of the Film Coalition; however, we continue to believe that the ATSC DTV Standard imposes no barrier to the accomplishment of their goal that all films be transmitted in their original aspect ratios. Indeed, we believe that the removal of the video format constraints from the mandatory aspects of the standard should make this fact more apparent. Moreover, we believe that the introduction of true HDTV will provide the greatest impetus for a reduction in the use of aspect ratio conversion techniques such as pan-and-scan, and we hope and expect that as this becomes better understood, more members of the film community will become strong advocates of HDTV.*

Today, aspect ratio accommodations, including the use of letterboxing techniques, are typically made during the telecine transfer process from film to video. With the advent of digital transmission, we expect this pre-broadcast process to continue to be the stage where such accommodations are made. In light of this fact, at its November 7, 1996 meeting, the ATSC Executive Committee formally requested that the Society of Motion Picture and Television Engineers ("SMPTE") develop Recommended Practices for the telecine transfer of films. We continue to encourage members of the Film Coalition to participate actively in the

* The wider aspect ratio associated with HDTV means that letterboxing of films will cause much less loss of picture height to black bands, making letterboxing less objectionable to viewers where noticeable at all. In addition, the loss of effective resolution caused by using less than the full screen height in a letterboxed picture will be less noticeable and less objectionable with the much greater nominal resolution of HDTV.

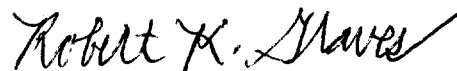
voluntary standards activities of both the ATSC and SMPTE to ensure that voluntary standards and recommended practices meet their needs as fully as possible.

In our Comments and Reply Comments in this proceeding we discussed in detail the tremendous benefits that will flow from prompt adoption of a DTV standard, including quantum improvements in the technical quality of free over-the-air television which will allow broadcasters to compete successfully against other delivery media in the future, a wealth of new information services that will also be enabled, the preservation and creation of high-skill jobs and increased economic growth, and the recovery of large blocks of invaluable nationwide spectrum that can support whole new generations of wireless services following the transition to digital broadcast television. By ending the controversy that has delayed adoption of a standard and jeopardized these benefits, the recent agreement paves the way for the Commission to adopt a DTV standard this year and bring these benefits to the American public. Furthermore, final FCC action this year will give a much-needed boost to ongoing industry efforts to promote use of the ATSC DTV Standard in other countries, benefiting all consumers served by the standard, as well as the American firms that made the pioneering digital television technological breakthroughs over the past six years.

Accordingly, before the end of this year the Commission should adopt the ATSC DTV Standard, except for its specific video format constraints, as the standard for digital terrestrial television broadcasts. In addition, the Commission should act early next year to finalize channel assignments and to issue service rules so that the implementation of digital terrestrial television can begin in earnest. By acting now, the Commission will trigger the substantial

final investments required to bring the tremendous benefits of this promising new technology to the American people.

Respectfully submitted,



Robert K. Graves
Chairman



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